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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,631	06/25/2003	Jong-Sung Jung	1349.1229	8988

21171 7590 03/29/2004  
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EXAMINER

NGUYEN, ANTHONY H

ART UNIT PAPER NUMBER

2854

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/602,631

Applicant(s)

JUNG, JONG-SUNG

Examiner

Anthony H Nguyen

Art Unit

2854

AW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Claim Rejections - 35 U.S.C. § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4,6-16 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Tung et al. (US 6,435,641).

With respect to claims 1 and 9, Tung et al. teaches a paper edge sensing method and apparatus which meet the steps and the structure as claimed. For example, Tung et al. teaches a printer 10 having a paper edge sensing apparatus which includes a carrier 300, a print head 303 mounted to the carrier, a paper sensor 330 mounted to the carrier at a predetermined distance from the print head and a controller 320 for controlling operation of the print head and paper print margin (Figs.4-5B, and col.5 the second paragraph). With respect to claim 9, Tung et al. teaches the steps of detecting a top edge using the paper sensor 330 and generating a print command when the top edge is detected (Fig.6A, steps 404-408) and an end command when the trailing edge is detected (Fig. 6B, steps 418 and 420). With respect to claims 10,11,14 and 15, Tung et al. teaches the steps of detecting top edge and begin counting a start printing time interval via the sensor 330 and the controller 320 (Tung et al., the paragraph bridging cols. 4 and 5). With respect to claim 20, Fig.6H, step 508 of Tung et al. shows the printed sheet is discharged to an output tray 16 from the printer.

### **Claim Rejections - 35 U.S.C. § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) a patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 17, 18 and 19 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Tung et al. (US 6,435,641).

With respect to claims 5, 17 and 18, Tung et al. teaches all that is claimed, except for the specific predetermined distance of the paper print margin to the edges of a sheet of paper. However, the selection of a desired predetermined distance between the print margin and the edges of a paper involves only an obvious matter of choice based upon a selection of a printing format. It would have been obvious to one of ordinary skill in the art to select a specific range of predetermined distance between the paper print margin and the edges of a sheet of paper in Tung et al. for uniform of printing on a print medium. With respect to claims 19, the step of tracking a position of a paper sensor while not specifically stated or shown in Tung et al. is necessary in a controller to providing an operative device. Thus, the step as broadly recited involves no apparent unobviousness.

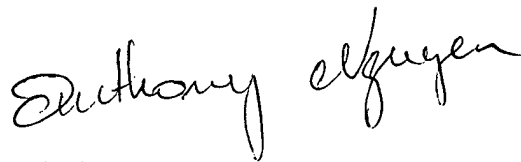
### ***Conclusion***

The patents to Chung et al., Driggers and Askren et al. are cited to show other structures and methods having obvious similarities to the claimed structure and method.

Art Unit: 2854

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Nguyen whose telephone number is (571) 272-2169. The examiner can normally be reached daily from 9 AM to 5PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld, can be reached on (571) 272-2168. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

A handwritten signature in black ink, appearing to read "Anthony Nguyen", with a stylized, cursive script.

Anthony Nguyen  
3/19/04  
Patent Examiner  
Technology Center 2800